Patent Claims

1. The use of polysaccharides, such as galactomannans, glucomannans and the like, for introducing active substances into the human or animal metabolism, characterized in that the vital substances, individually or as a complex, are embedded separately and in each case functionally separated from one another in a plant-based matrix of the polysaccharide.

2. Use according to Claim 1, characterized in that the vital substances are vitamins, minerals, trace elements, plant ingredients, amino acids, coenzymes and other metabolically active substances.

3. Use according to Claim 1 or 2, characterized in that

3.1 the active substance is dissolved in water or, in the case of fat-soluble active substances, it is suspended in water,

3.2 the solution or suspension is introduced slowly into the purified polysaccharide and mixed,

3.3 the resulting gel is dried by a gentle method,

3.4 the cake formed as a result of the drying is comminuted and

3.5 is sieved to the desired particle, size (preferably 0.2 - 2 mm).

4. Polysaccharide according to any of Claims 1 to 3, characterized in that granules (1) consist of a multiplicity of granular particles 2, 3, a first active substance is incorporated in a first granular particle and a second active substance is incorporated in a second granular particle.

5. Polysaccharide according to Claim 4, characterized in that the granular particles (2, 3) are functionally separated and do not mix or interact with one another in an undesired manner.

6. Polysaccharide according to any of Claims 1 to 5, characterized in that the granular particles (2, 3) are formed from a multiplicity of net-like or lattice-like polysaccharide molecules 5 which form a lattice structure 4 and that the active substance

ions (7) are bound into the lattice structure (4) of the polysaccharide molecules (5) in the interstices (6) of the lattice structure (4) by a coordinate bond.

7. Polysaccharide according to any of Claims; 1 to 6, characterized in that the polysaccharide molecules (5) are surrounded by an H_2O envelope which completely surrounds and screens the filament-like structure.

8. Polysaccharide according to any of Claims 1 to 7, characterized in that OH groups arc attached to the filament-like polysaccharide molecules (5), and that the active substance ions 7 are bound in the interstice (6) by a coordinate bond.

9. Polysaccharide according to any of Claims 1 to 8, characterized in that, on penetration of water or intestinal fluid into the interstices (6) of the molecules (5), the latter move in two dimensions towards one another (in the directions of arrows 10, 11).

10. Polysaccharide according to any of Claims I to 9, characterized in that the delayed release of the active substances takes place as a result of the fact that the individual filaments are removed layer by layer by the penetrating water or the intestinal fluid, and the lattice structure is thus also removed layer by layer in order thus to release the active substance ions (7) located in the interstice (6).

11. Polysaccharide according to any of Claims 1 to 10, characterized in that the filament-like molecules are surrounded by a hydrate jacket (H_20 envelope 9).